

### Abstract of the Disclosure

In a coarse honing step in a section (101), a honing head (15) provided with coarse honing hones (17) is inserted into a cylinder bore (13) of a cylinder block (11), the honing head 15 is rotated while axially moving it, and the inner peripheral surface of the cylinder bore (13) is thereby ground. In the next idling step in a section (102), the cylinder block (11) is left as it is for (60) seconds to generate a springback (S). In a subsequent finishing honing step in a section (103), a honing head (21) provided with finishing honing hones (19) is inserted into the cylinder bore (13), the honing head (21) is rotated in a reverse direction to a rotational direction in the coarse honing step while axially moving it, and the inner peripheral surface of the cylinder bore (13) is thereby ground. Further, a coolant is supplied to the sections of the coarse honing step, the idling step, and the finishing honing step from coolant nozzles (23), (25), and (27), respectively, using a common coolant supply source (29).